

VertiBond™ 1 Capillary Columns

- 100% Dimethylpolysiloxane
- Non-polar stationary phase
- Excellent general purpose columns
- High temperature range
- High efficiency, high inertness columns

VertiBond™ 1 column contains 100% Dimethylpolysiloxane stationary phase. This is the most popular non-polar stationary phase in use. Separation is almost entirely based on boiling points, making the columns suitable for a wide range of applications with a broad temperature range.



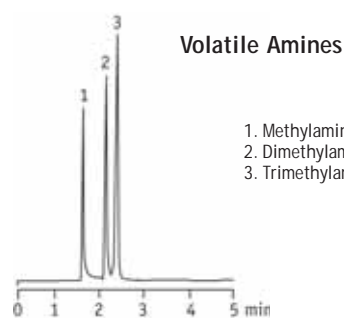
VertiBond™ 1 Capillary Columns					
Length (m)	I.D. (mm)	Film (µm)	Temp. Limits (°C)	Part No.	
10	0.25	0.10	360/370	0400-2000	
		0.20	360/370	0400-2040	
		0.25	360/370	0400-2050	
	0.32	0.10	360/370	0400-3000	
		0.25	360/370	0400-3050	
		0.30	360/370	0400-3060	
		0.53	0.25	360/370	0400-5050
	15	0.25	1.20	340/360	0400-5120
			2.65	340/360	0400-5180
			5.00	340/360	0400-5210
0.10			360/370	0400-2001	
0.20			360/370	0400-2041	
0.25			360/370	0400-2051	
0.50			360/370	0400-2091	
0.32	0.10	1.00	340/360	0400-2111	
		0.25	360/370	0400-3001	
		0.25	360/370	0400-3051	
		0.30	360/370	0400-3061	
		0.50	360/370	0400-3091	
		1.00	340/360	0400-3111	
		1.50	320/340	0400-3151	
		3.00	310/330	0400-3191	
		5.00	260/280	0400-3211	
		0.45	0.13	0.42	340/360
0.42	300/320			0400-4071	
1.00	350/350			0400-4111	
1.27	300/320			0400-4131	
2.55	270/290			0400-4171	
4.25	270/290			0400-4201	

VertiBond™ 1 Specifications

Phase:	100% Dimethylpolysiloxane
Polarity:	Non-polar
USP Designation:	G1, G2, G38
Ideal for:	General Purpose

VertiBond™ 1 equivalent phase

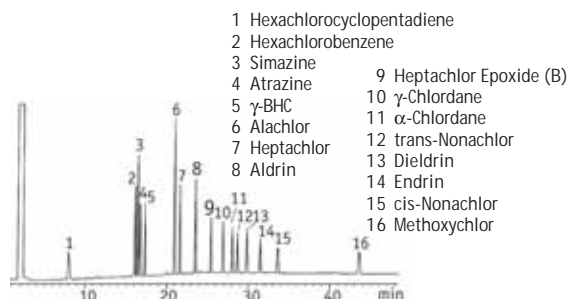
Restek	Rtx-1
Agilent	HP-1, HP-101, ULTRA-1, DB-1, DB-2887
Supelco	SPB-1, Equity-1, SPB-1 Sulfur
Alltech	AT-1
SGE	BP-1
Varian	CP-SIL5CB
Ohio Valley	OV-1
Phenomenex	ZB-1



Column: VertiBond™ 1, 30m x 0.53mm, 5.0 µm
 Part No.: 0400-5213
 Temp: 30°C
 Injector: Split 1:10
 Detector: FID
 Carrier gas: Nitrogen at 30mL/min

VertiBond™ 1 Capillary Columns					
Length (m)	I.D. (mm)	Film (µm)	Temp. Limits (°C)	Part No.	
15	0.53	0.10	360/370	0400-5001	
		0.15	360/370	0400-5021	
		0.25	360/370	0400-5051	
		0.50	360/370	0400-5091	
		1.00	340/360	0400-5111	
		1.20	340/360	0400-5121	
		1.50	340/360	0400-5151	
		2.65	340/360	0400-5181	
		3.00	340/360	0400-5191	
		5.00	340/360	0400-5211	
25	0.25	0.20	360/370	0400-2042	
		0.32	360/370	0400-3062	
		0.50	360/370	0400-3092	
30	0.25	0.10	360/370	0400-2003	
		0.20	360/370	0400-2043	
		0.25	360/370	0400-2053	
		0.50	360/370	0400-2093	
		1.00	360/370	0400-2113	
		0.32	0.10	360/370	0400-3003
		0.25	360/370	0400-3053	
		0.30	360/370	0400-3063	
		0.50	360/370	0400-3093	
		1.00	340/360	0400-3113	
0.45	0.42	1.50	320/340	0400-3153	
		3.00	310/330	0400-3193	
		5.00	260/280	0400-3213	
		1.00	350/350	0400-4113	
		1.27	300/320	0400-4133	
		2.55	270/290	0400-4173	
		4.25	270/290	0400-4203	
0.53	0.10	1.00	360/370	0400-5003	
		0.25	360/370	0400-5053	
		0.50	360/370	0400-5093	
		1.00	340/360	0400-5113	
		1.20	340/360	0400-5123	
50	0.25	1.50	340/360	0400-5153	
		2.65	340/360	0400-5183	
		3.00	340/360	0400-5193	
		5.00	340/360	0400-5213	
		0.32	0.30	360/370	0400-3064
0.53	1.20	340/360	0400-5124		
		5.00	340/360	0400-5214	

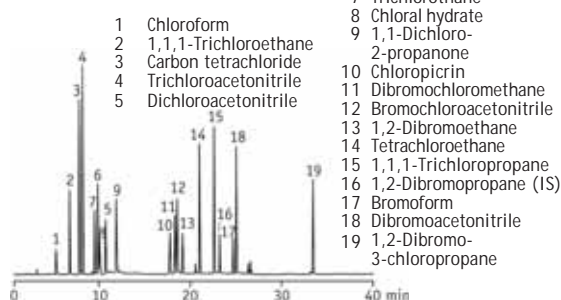
EPA 505 Organohalide pesticides



- 1 Hexachlorocyclopentadiene
- 2 Hexachlorobenzene
- 3 Simazine
- 4 Atrazine
- 5 γ-BHC
- 6 Alachlor
- 7 Heptachlor
- 8 Aldrin
- 9 Heptachlor Epoxide (B)
- 10 γ-Chlordane
- 11 α-Chlordane
- 12 trans-Nonachlor
- 13 Dieldrin
- 14 Endrin
- 15 cis-Nonachlor
- 16 Methoxychlor

Column: VertiBond™ 1, 30m x 0.32mm, 5.0 µm
 Part No.: 0400-3213
 Temp: 150-240°C 4 °C/min, 240°C (hold 30 min)
 Injector: Splitless at 200°C
 Detector: FID
 Carrier gas: Helium 25cm/sec at 150°C

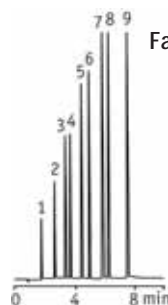
EPA Method 551



- 6 Bromodichloromethane
- 7 Trichloroethane
- 8 Chloral hydrate
- 9 1,1-Dichloro-2-propanone
- 10 Chloropicrin
- 11 Dibromochloromethane
- 12 Bromochloroacetonitrile
- 13 1,2-Dibromoethane
- 14 Tetrachloroethane
- 15 1,1,1-Trichloropropane
- 16 1,2-Dibromopropane (IS)
- 17 Bromoform
- 18 Dibromoacetonitrile
- 19 1,2-Dibromo-3-chloropropane

Column: VertiBond™ 1, 30 m x 0.25 mm, 1.0 µm
 Part No.: 0400-2113
 Temp: 35°C for 9 min, 35-40°C at 10°/min, 40°C for 3 min, 40-150°C at 6°/min, 150°C for 1 min
 Injector: Splitless at 200°C
 Detector: ECD 300°C
 Carrier gas: Helium 24.8cm/sec at 150°C

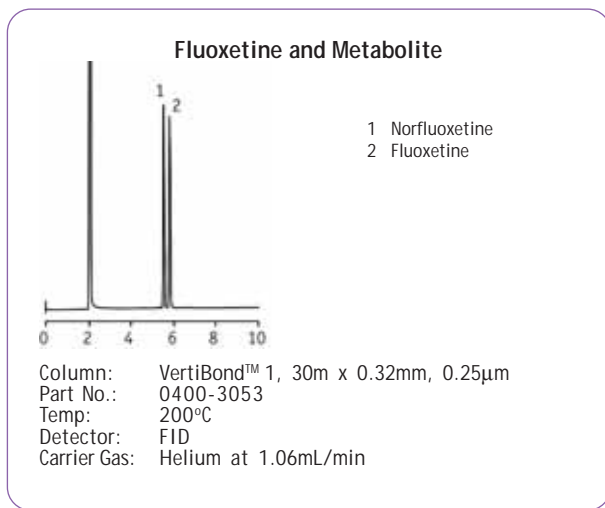
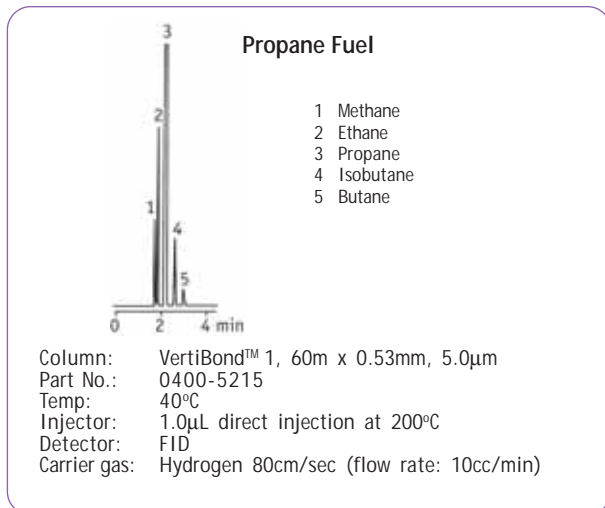
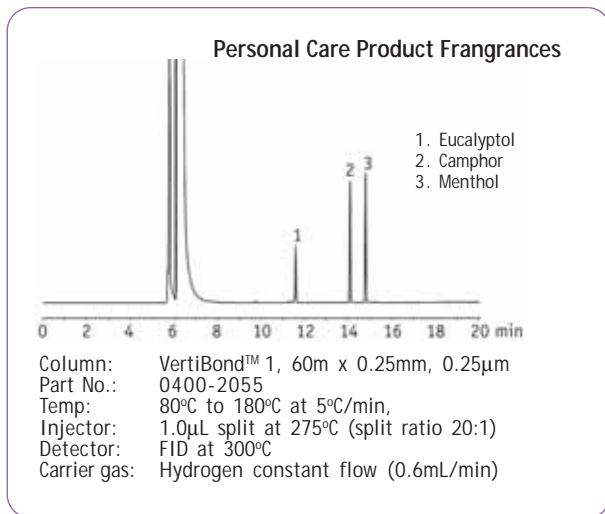
Fatty Acids (Free)



1. Acetic acid
2. Propionic acid
3. Isobutyric acid
4. n-Butyric acid
5. Isovaleric acid
6. n-Valeric acid
7. Isocaproic acid
8. Caproic acid
9. Heptanoic acid

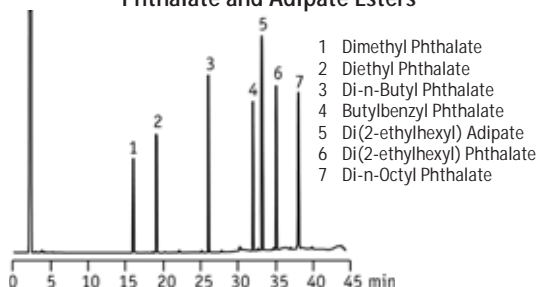
Column: VertiBond™ 1, 30 m x 0.53 mm, 5.0 µm
 Part No.: 0400-5213
 Temp: 60°C to 180°C at 15°C/min,
 Injector: 0.2µL free fatty acid standard in water, 250 °C
 Detector: FID
 Carrier Gas: Hydrogen 50cm/sec (flow rate: 6cc/min)

VertiBond™ 1 Capillary Columns					
Length (m)	I.D. (mm)	Film (µm)	Temp. Limits (°C)	Part No.	
60	0.25	0.10	360/370	0400-2005	
		0.25	360/370	0400-2055	
		0.50	360/370	0400-2095	
	0.32	0.10	360/370	0400-3005	
		0.25	360/370	0400-3055	
		0.50	360/370	0400-3095	
	0.45	1.27	1.00	340/360	0400-3115
			1.50	320/340	0400-3155
			3.00	310/330	0400-3195
		0.53	5.00	300/300	0400-3215
			1.27	300/320	0400-4135
			0.10	360/370	0400-5005
	105	0.25	0.10	360/370	0400-5055
			0.25	360/370	0400-5055
			0.50	360/370	0400-5095
0.32		0.10	1.00	340/360	0400-5115
			1.20	340/360	0400-5125
			1.50	340/360	0400-5155
0.53		1.20	3.00	340/360	0400-5195
			5.00	340/360	0400-5215
			0.10	360/370	0400-2007
		0.25	0.25	360/370	0400-2057
			0.50	360/370	0400-2097
			1.00	340/360	0400-2117
0.53		0.25	0.10	360/370	0400-3007
			0.25	360/370	0400-3057
			0.50	360/370	0400-3097
	0.53	1.00	340/360	0400-3117	
		1.50	320/340	0400-3157	
		3.00	310/330	0400-3197	
0.53	1.20	3.00	340/360	0400-5127	
		3.00	340/360	0400-5197	
		5.00	340/360	0400-5217	



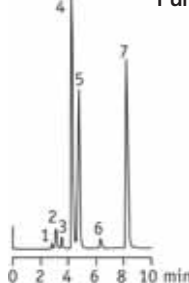
Capillary Columns

Phthalate and Adipate Esters



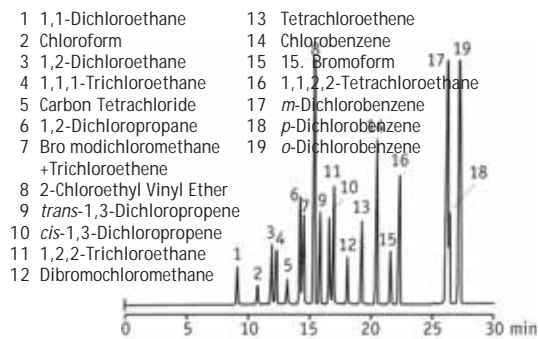
Column: VertiBond™ 1, 30m x 0.32mm, 0.25µm
 Part No.: 0400-3053
 Temp: 60°C (1 min hold) to 260°C at 6°C/min
 Detector: FID at 295°C
 Carrier Gas: Helium at 32cm/sec

Purgeable Halocarbons



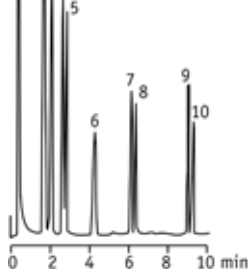
Column: VertiBond™ 1, 30m x 0.53mm, 5.00µm
 Part No.: 0400-5213
 Temp: 35°C
 Detector: FID
 Carrier Gas: Helium at 3mL/min

Halocarbons



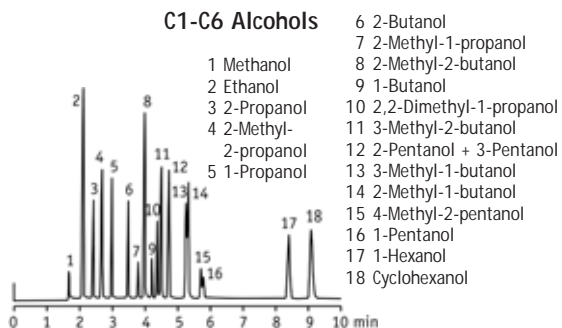
Column: VertiBond™ 1, 30m x 0.53mm, 5.00µm
 Part No.: 0400-5213
 Temp: 40°C (5 min hold) to 200°C/min at 5°C/min
 Detector: FID
 Carrier Gas: Helium at 3mL/min

Citrus Reference Mix



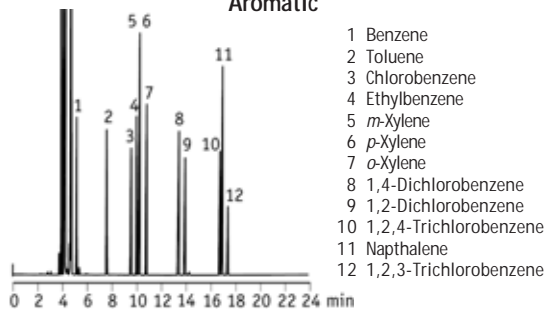
Column: VertiBond™ 1, 10m x 0.53mm, 0.20µm
 Part No.: 0400-5120
 Temp: 75°C (5 min hold) to 150°C at 10°C/min
 Detector: FID
 Carrier Gas: Helium 5mL/min

C1-C6 Alcohols



Column: VertiBond™ 1, 30m x 0.53mm, 5.00µm
 Part No.: 0400-5213
 Temp: 35°C to 100°C at 5°C/min
 Detector: FID
 Carrier Gas: Helium at 3mL/min

Aromatic



Column: VertiBond™ 1, 30m x 0.32mm, 1.00µm
 Part No.: 0400-3113
 Temp: 60°C (4 min hold) to 200°C at 10°C/min
 Detector: FID
 Carrier Gas: Helium at 1.3mL/min